

Date: Monday, 11/08/2008 1:04:06 PM  
 User: Melanie Fauteux

## Process Sheet

Customer	: CU-DAR001 Dart Helicopters Services	Drawing Name	: 412 SKI WEARPLATE
Job Number	: 41111		
Estimate Number	: 13542		
P.O. Number	:	Part Number	: D3796041
This Issue	: 11/08/2008 S.O. No. :	Drawing Number	: D3796 REV.A PREL
Prsht Rev.	: NC	Project Number	: N/A
First Issue	: / / Type : R & D SM/MED FAB	Drawing Revision	: PRELIM
Previous Run	: 41009	Material	:
Written By	:	Due Date	: 18/08/2008 Qty: 3 Um: Each
Checked & Approved By	: <u>MF 08-08-11</u>		
Comment	: Est Rev:A 08-08-05 new issue DD verified by:ec		



## Additional Product

# PRELIMINARY ISSUE

Job Number:



Seq. #:	Machine Or Operation:	Description :
---------	-----------------------	---------------

1.0	M304S16GA	304/316 Sheet .063
-----	-----------	--------------------



Comment: Qty.: 2.0769 sf(s)/Unit Total: 6.2307 sf(s)

NEOPRENE SHEET 0.063

batch: 108724 IB 8-8-11

⑥

③

2.0	WATER JET	FLOW WATER JET
-----	-----------	----------------



Comment: FLOW WATER JET

1-Cut as per Dwg D3796

Dwg Rev: PRE

Prog Rev: PRE

IB 8-8-11

2-Deburr if necessary

IB 8-8-11

③

⑥

3.0	QC2	INSPECT PARTS AS THEY COME OFF MACHINE
-----	-----	--



Comment: INSPECT PARTS AS THEY COME OFF MACHINE

IB 8-8-11

③

⑥

4.0	QC8	SECOND CHECK
-----	-----	--------------



Comment: SECOND CHECK

IB 08-08-11

③

⑥

PTC

Last page

5.0	D30093	Cup
-----	--------	-----



Comment: Qty.: 12.0000 Each(s)/Unit Total: 36.0000 Each(s)

Cup

batch: 041075

12x 41176-1

08-08-14

Date: Monday, 11/08/2008 1:04:06 PM  
User: Melanie Fauteux

## Process Sheet

Customer: CU-DAR001 Dart Helicopters Services

Drawing Name: 412 SKI WEARPLATE

Job Number: 41111

Part Number: D3796041

Job Number:



Seq. #:

Machine Or Operation:

Description :

6.0

LARGE FAB 1

LARGE FABRICATION RESOURCE 1



Comment: LARGE FABRICATION RESOURCE 1

Weld hardcoat and cups as per dwg D3796

08-08-14

(X2)

7.0

QC9

VISUAL WELDING INSPECTION



Comment: VISUAL WELDING INSPECTION

PD 08-08-15 (2)

8.0

QC5

INSPECT WORK TO CURRENT STEP



Comment: INSPECT WORK TO CURRENT STEP

08-08-15 (2)

ENGINEERING APPROVAL  
08-08-20

9.0

PACKAGING 1

PACKAGING RESOURCE #1



Comment: PACKAGING RESOURCE #1

Identify and  
Location:

41077

8/8/18

(2)

10.0

QC21

FINAL INSPECTION/W/O RELEASE



Comment: FINAL INSPECTION/W/O RELEASE

08/09/09  
08-08-20

Job Completion



POSITIVE RECALL

EFFECTIVE 08-08-11

AUTH U

RELEASED

DATE 08-08-18

08/08/18

08-08-18

08-09-08

(2X)

8-5

Powder coat  
grey

M106442

M-2

QC 3

U

Perm. Change  
08/08/18

**ENGINEERING CHANGE NOTICE**  
**DART AEROSPACE LTD**

Date: 08.08.05	Job No.: 00245	ADR Yes/No: N	ADR Date: N/A	ECN #: 08- 509P
Product No.: D412-777		Created By: <i>hp</i>	Approved By: <i>hp</i>	
Product Name: BEARPAW SKIS		Checked By: <i>hp</i>	General Manager Approval: <i>hp</i>	

Distribution	Reqd	Resp	Initial / Date
Production Manager	Y	LL	
Production Engineering Coord	Y	EC/DD	
Production Document Control	N		
Customer Technical Support	N		

Distribution	Reqd	Resp	Initial / Date
DQA / QA Coord	N		
QC Coordinator	N		
Marketing	N		
Customer Order Processing	N		

**Reason for Change:**  
MANUFACTURING OF WEARPLATES FOR BEARPAW SKIS - PARTS WILL BE SHIPPED TO AUTRIAN ARMY FOR FIT & FUNCTION TEST

**Documents Affected:**  
RELEASE PRELIM ISSUE OF D3796 REV. A

**REFERENCE ONLY**

PARTS MUST COMPLY

☒

PREVIOUS PARTS SATISFACTORY

☐

#	Quality Assurance Actions	Reqd	Resp	Notes	Complete
1	Notify Previous Customers	N			
2	Notify Eurocopter France	N			
3					

#	Engineering Actions	Reqd	Resp	Notes	Complete
4	Required Documents/Drawings Under Review	N			
5	Update Product Compatability Matrix	N			
6	Create Eurocopter Form (FEE)	N			
7	Notify TC / FAA of Change	N			

#	Document Control Actions	Reqd	Resp	Notes	Complete
8	Move Electronic Files	N			
9	Update Blue/Pink/DSI Folder and Electronic Files	N			
10	Update Controlled PDF Files	N			
11	Update Master Document List (MDL)	N			
12	Update Document Record (DR)	N			
13	Update Product Development Summary	N			
14	Update QSI 021 and/or STC Approval List	N			
15	Update Parts / STC Database	Y	KJ	CREATE PARTS IN ACCPAC	
16	Update / Verify ARC Database	N			
17	Create / Update Change Record Form	N			
18	Create / Update PPP's	N			
19	Update Document Control Database / Laminated Dwgs	N			
20	Update Grey Project Binder	N			
21	Update D-Part/M-Drawing/DSI/DEO Master Binders	N			
22					
23					

**Description / Action:**  
MANUFACTURE 2 EACH OF D3796-041/-043 FOR AUSTRIAN FIT & FUNCTION INSTALLATION TEST.  
RETURN PARTS TO ENGINEERING AFTER COMPLETION.

ECN Verified & Complete: \_\_\_\_\_ Date: \_\_\_\_\_

<b>DART AEROSPACE LTD</b>	<b>Work Order:</b>	4111
<b>Description:</b> 412 SKI WEARPLATE	<b>Part Number:</b>	D3796-1
<b>Inspection Dwg:</b> D3796-1 <b>Rev:</b> PRE		Page 1 of 1

## FIRST ARTICLE INSPECTION CHECKLIST

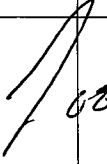


☒ **First Article**      ☐ **Prototype**

[illegible]



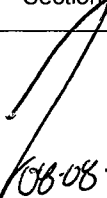


Measured by:	LB	Audited by:	LB	Prototype Approval:	N/A
Date:	8-8-11	Date:	08-08-11	Date:	

Rev	Date	Change	Revised by	Approved
A		New Issue	KJ/JLM	

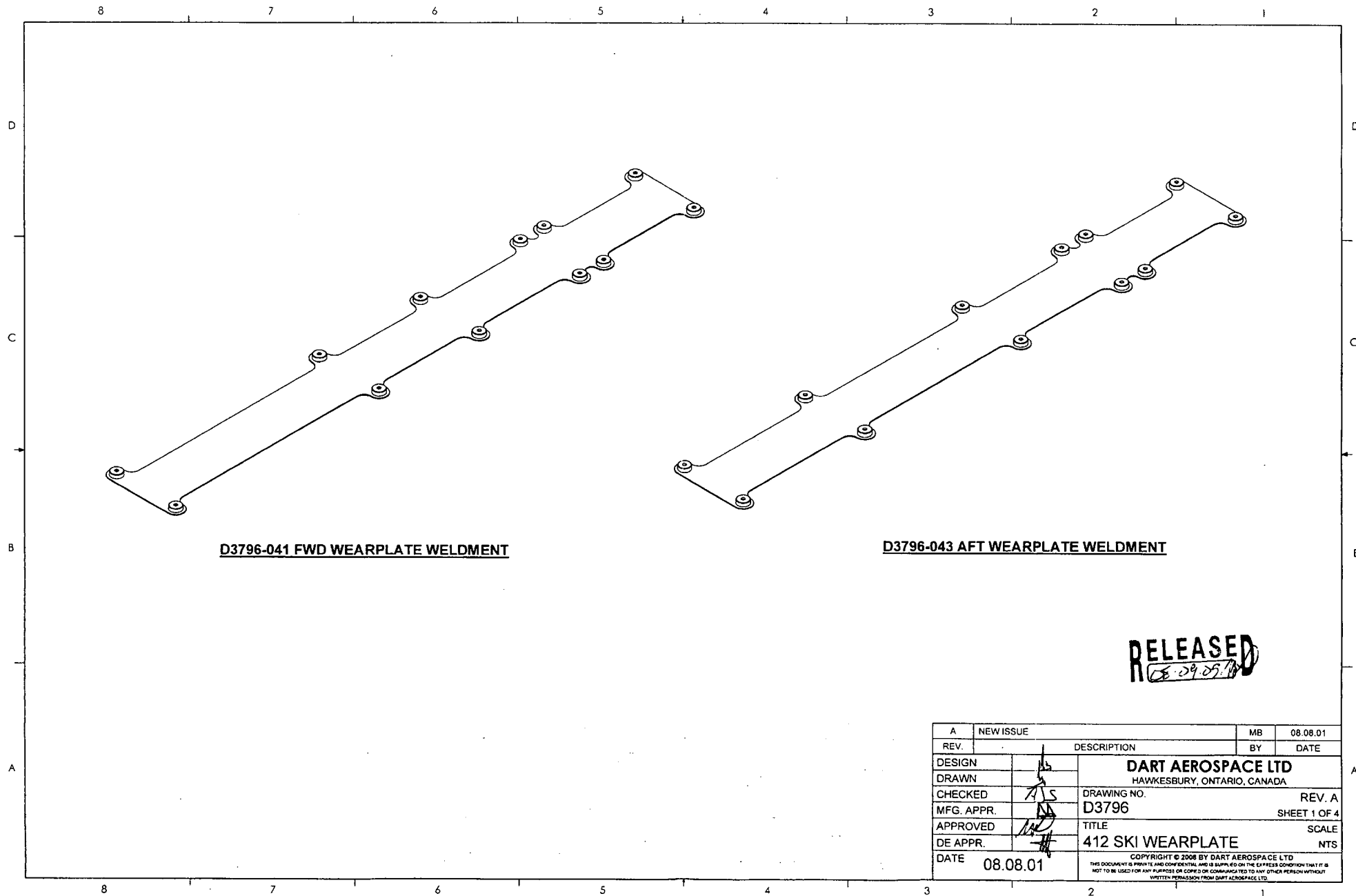
# Dart Aerospace Ltd

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector
080815	2-0	1 part taken <del>for</del> to make a weld pattern template. for DT 9040		080815	①	 081012	 080815

Part No: D3796-041 PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes (No) DQA: D Date: 080810  
 QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

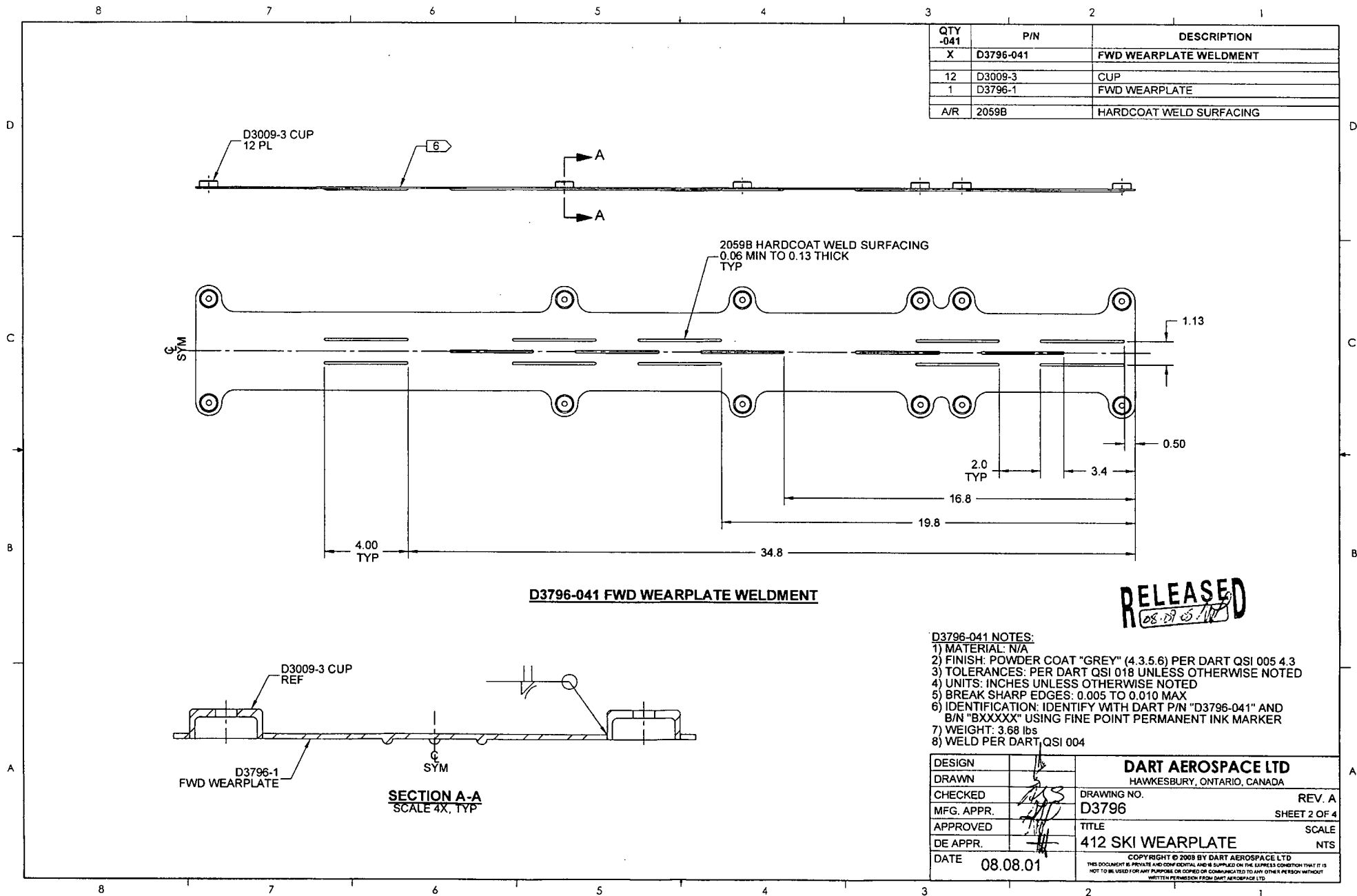
NCR: <u>41111</u>		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			
080815	6-0	Qty 6 parts scrap. parts warped during welding; no longer fit into the ass'y.		create a weld jig. DT 9040	 080815	 080815	 081012	 080815
		R.C: No weld jig to hold the parts true to maintain the shape.		scrap; destroy the parts. <del>and</del> 08108115				

NOTE: Date & initial all entries

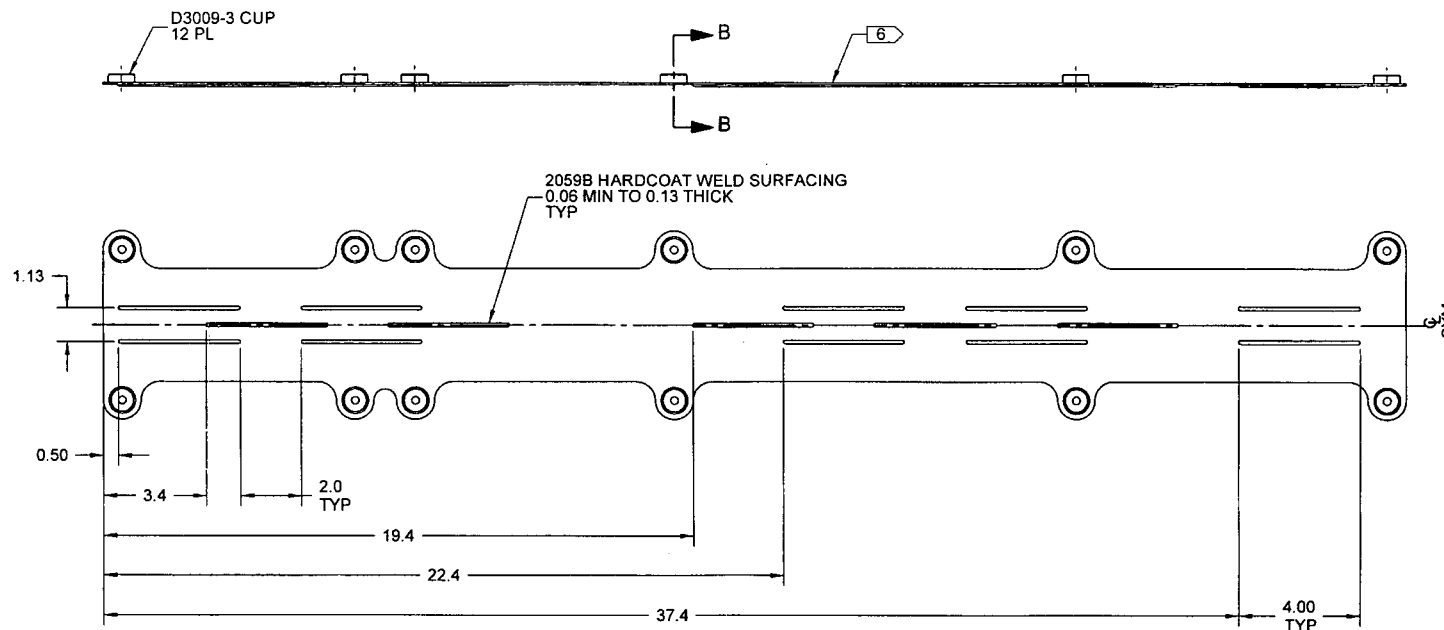


**RELEASED**  
08-09-05

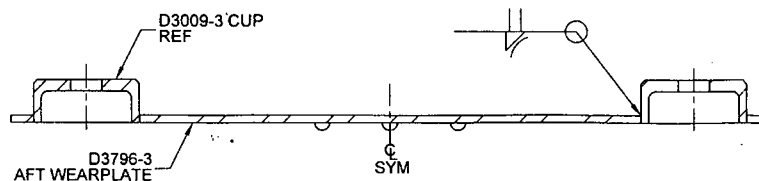
A	NEW ISSUE	MB	08.08.01
REV.		DESCRIPTION	BY DATE
DESIGN		<b>DART AEROSPACE LTD</b> HAWKESBURY, ONTARIO, CANADA	
DRAWN		DRAWING NO.	REV. A
CHECKED		<b>D3796</b>	SHEET 1 OF 4
MFG. APPR.		TITLE	SCALE
APPROVED		<b>412 SKI WEARPLATE</b>	NTS
DE APPR.		<small>COPYRIGHT © 2008 BY DART AEROSPACE LTD THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.</small>	
DATE	08.08.01		



QTY	P/N	DESCRIPTION
-043		
X	D3796-043	AFT WEARPLATE WELDMENT
12	D3009-3	CUP
1	D3796-3	AFT WEARPLATE
A/R	2059B	HARDCOAT WELD SURFACING



**D3796-043 AFT WEARPLATE WELDMENT**



**SECTION B-B**  
SCALE 4X, TYP

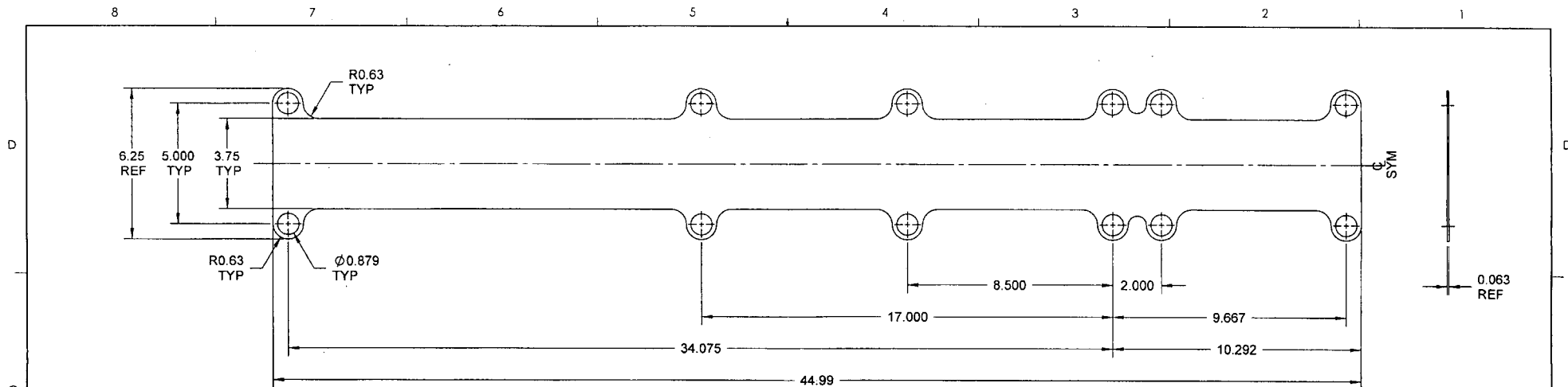
**D3796-043 NOTES:**

- 1) MATERIAL: N/A
- 2) FINISH: POWDER COAT "GREY" (4.3.5.6) PER DART QSI 005 4.3
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
- 6) IDENTIFICATION: IDENTIFY WITH DART P/N "D3796-043" AND B/N "BXXXXX" USING FINE POINT PERMANENT INK MARKER
- 7) WEIGHT: 3.54 lbs
- 8) WELD PER DART QSI 004

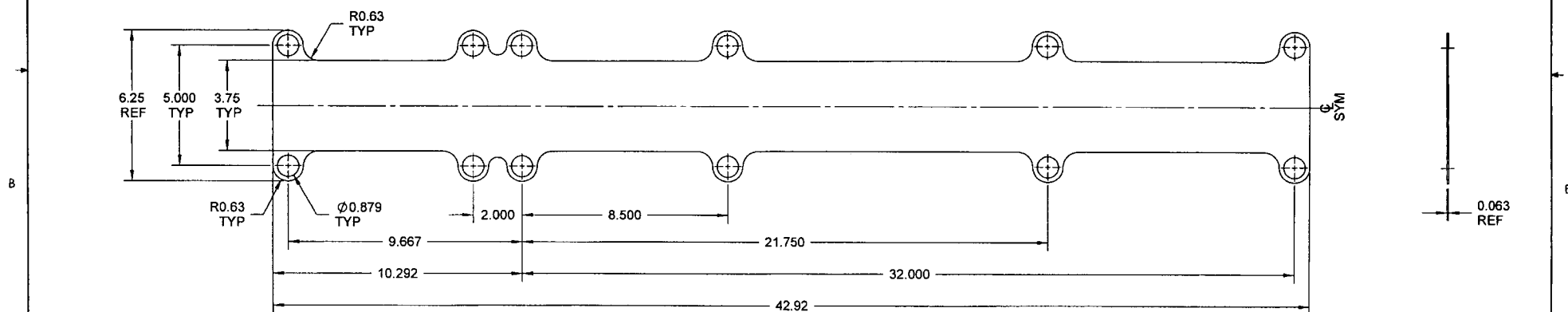
DESIGN		<b>DART AEROSPACE LTD</b>	
DRAWN		HAWKESBURY, ONTARIO, CANADA	
CHECKED		DRAWING NO.	REV. A
MFG. APPR.		D3796	SHEET 3 OF 4
APPROVED		TITLE	SCALE
DE APPR.		412 SKI WEARPLATE	NTS
DATE	08.08.01	COPYRIGHT © 2008 BY DART AEROSPACE LTD THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD	

**RELEASED**  
08.07.05





**D3796-1 FWD WEARPLATE**



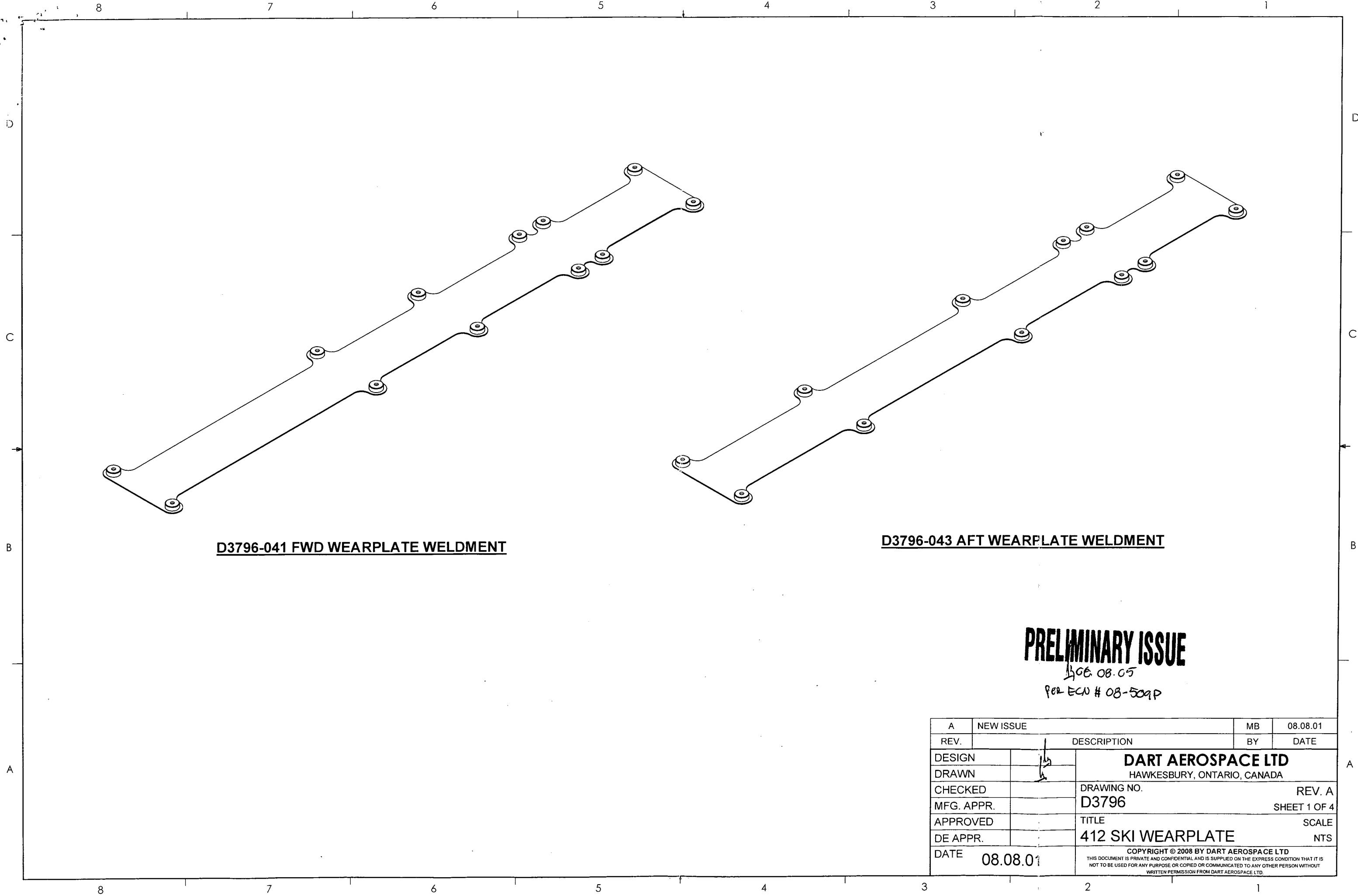
**D3796-3 AFT WEARPLATE**

**D3796-1/-3 NOTES:**


- 1) MATERIAL: AISI 304/316 STAINLESS STEEL SHEET, 16 GAUGE (0.063 THICK)  
PER MIL-S-5059 (ANNEALED) 2B FINISH OR AMS 5513/5524  
REF. DART SPEC. M304S16GA
- 2) FINISH: NONE
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
- 6) IDENTIFICATION: NONE
- 7) WEIGHT:  
D3796-1 = 3.25 lbs  
D3796-3 = 3.11 lbs

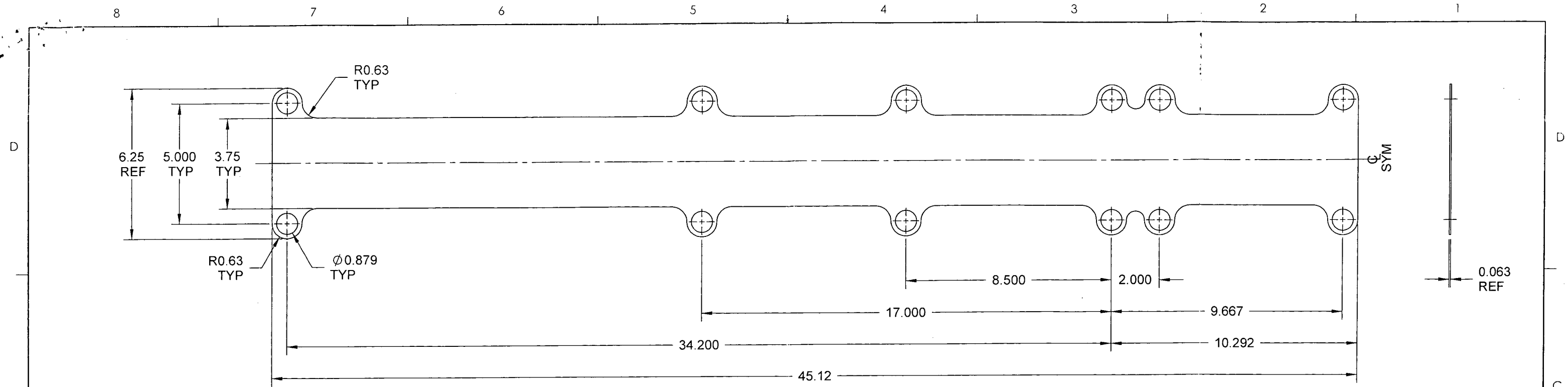
**RELEASED**  
08-09-03-14

DESIGN		<b>DART AEROSPACE LTD</b>	
DRAWN		HAWKESBURY, ONTARIO, CANADA	
CHECKED		DRAWING NO.	REV. A
MFG. APPR.		<b>D3796</b>	SHEET 4 OF 4
APPROVED		TITLE	SCALE
DE APPR.		<b>412 SKI WEARPLATE</b>	NTS
DATE	08.08.01	COPYRIGHT © 2008 BY DART AEROSPACE LTD THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD	

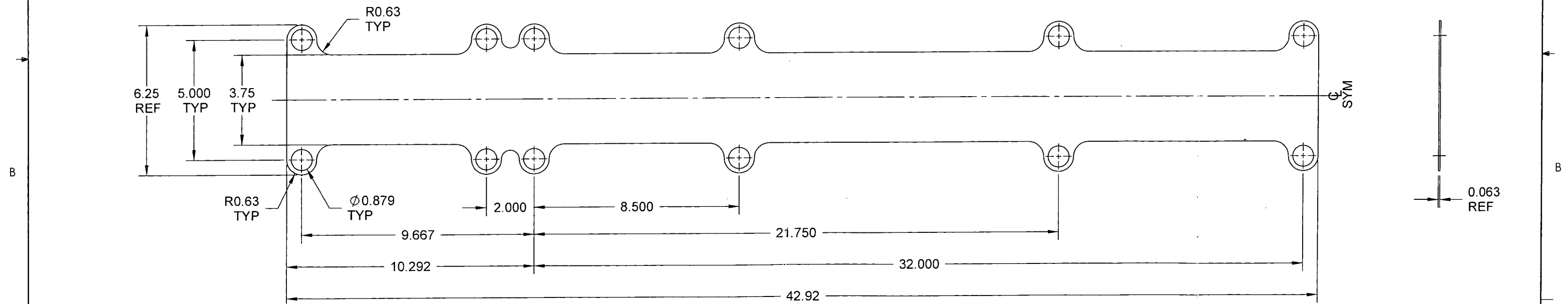


**PRELIMINARY ISSUE**  
LOG 08.05  
PER ECN # 08-509P

A	NEW ISSUE		MB	08.08.01
REV.	DESCRIPTION		BY	DATE
DESIGN		<b>DART AEROSPACE LTD</b> HAWKESBURY, ONTARIO, CANADA		
DRAWN				
CHECKED		DRAWING NO.	REV. A	
MFG. APPR.		D3796	SHEET 1 OF 4	
APPROVED		TITLE	SCALE	
DE APPR.		412 SKI WEARPLATE	NTS	
DATE	08.08.01	COPYRIGHT © 2008 BY DART AEROSPACE LTD THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.		



**D3796-1 FWD WEARPLATE**





**D3796-3 AFT WEARPLATE**

D3796-1/-3F NOTES:

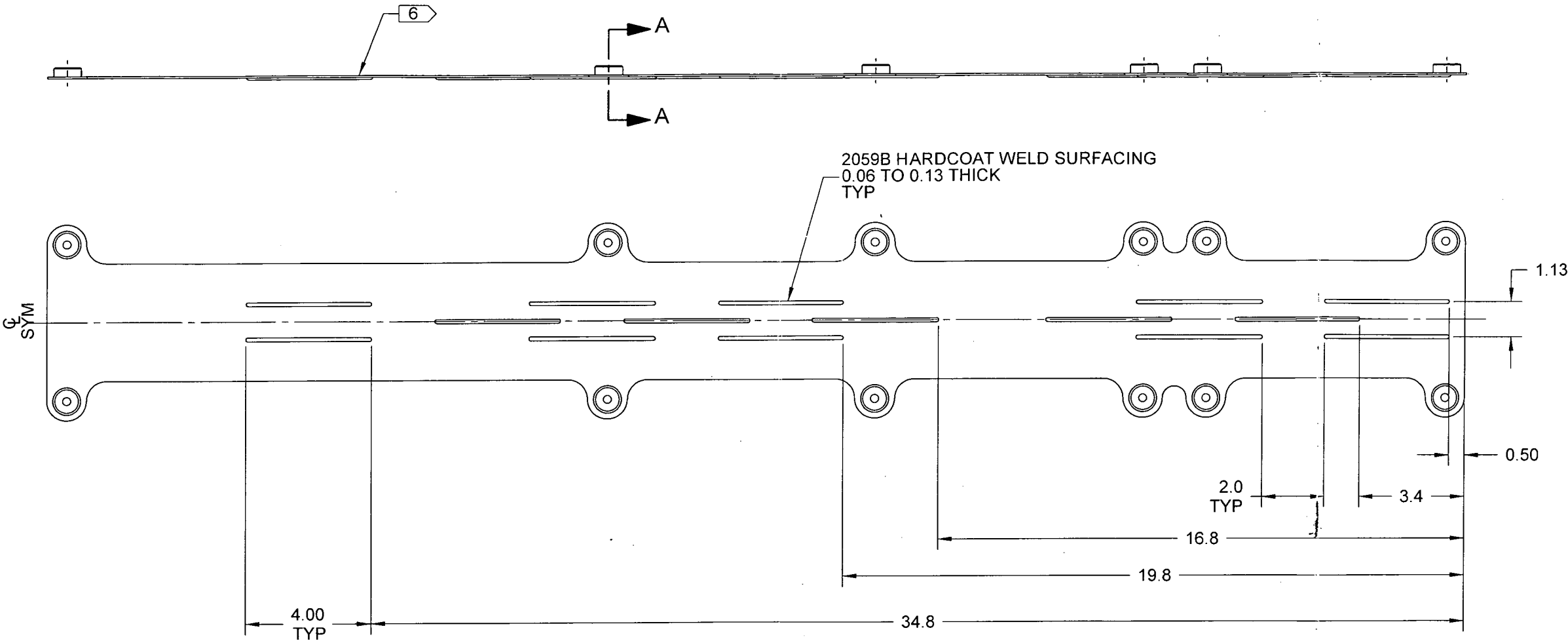
- D3796-1-31 NOTED:
- 1) MATERIAL: AISI 304/316 STAINLESS STEEL SHEET, 16 GAUGE (0.063 THICK)  
PER MIL-S-5059 (ANNEALED) 2B FINISH OR AMS 5513/5524  
REF. DART SPEC. M304S16GA)
  - 2) FINISH: NONE
  - 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
  - 4) UNITS: INCHES UNLESS OTHERWISE NOTED
  - 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
  - 6) IDENTIFICATION: NONE
  - 7) WEIGHT:  
D3796-1 = 3.26 lbs  
D3796-3 = 3.11 lbs

**PRELIMINARY ISSUE**

08.08.05  
PER EEN#08-509P

DESIGN		<b>DART AEROSPACE LTD</b>	
DRAWN		HAWKESBURY, ONTARIO, CANADA	
CHECKED		DRAWING NO.	REV. A
MFG. APPR.		D3796	SHEET 4 OF 4
APPROVED		TITLE	SCALE
DE APPR.		412 SKI WEARPLATE	NTS
DATE 08.08.01		COPYRIGHT © 2008 BY DART AEROSPACE LTD THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.	

QTY -041	P/N	DESCRIPTION
X	D3796-041	FWD WEARPLATE WELDMENT
12	D3009-3	CUP
1	D3796-1	FWD WEARPLATE

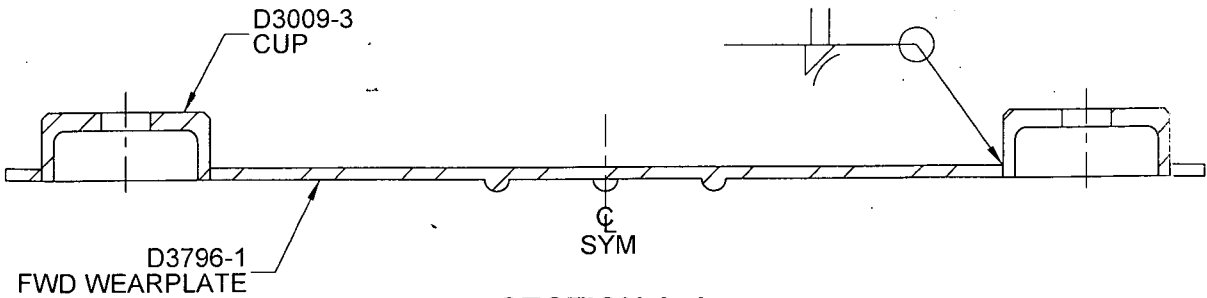


D3796-041 FWD WEARPLATE WELDMENT

PRELIMINARY ISSUE

2008-08-05  
Per ECN # 08-509P

- D3796-041 NOTES:
- 1) MATERIAL: N/A
  - 2) FINISH: POWDER COAT "GREY" (4.3.5.6) PER DART QSI 005 4.3
  - 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
  - 4) UNITS: INCHES UNLESS OTHERWISE NOTED
  - 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
  - 6) IDENTIFICATION: IDENTIFY WITH DART P/N "D3796-041" AND B/N "BXXXXX" USING FINE POINT PERMANENT INK MARKER
  - 7) WEIGHT: 3.69 lbs
  - 8) WELD PER DART QSI 004



SECTION A-A  
SCALE 4X, TYP

DESIGN		<b>DART AEROSPACE LTD</b>	
DRAWN		HAWKESBURY, ONTARIO, CANADA	
CHECKED		DRAWING NO.	REV. A
MFG. APPR.		D3796	SHEET 2 OF 4
APPROVED		TITLE	SCALE
DE APPR.		412 SKI WEARPLATE	NTS
DATE	08.08.01	COPYRIGHT © 2008 BY DART AEROSPACE LTD THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.	